

U.S. Department of Transportation
Alternative Fuel Vehicle Acquisition Report for Fiscal Year 2000

Authority

This report has been developed in accordance with the Energy Policy Act of 1992 (EPACT) (42 U.S.C. 13211-13219) as amended by the Energy Conservation Reauthorization Act of 1998 (Public Law 105-388) (ECRA), and Executive Order 13149, titled "Greening the Government through Transportation and Fleet Efficiency (E.O. 13149)."

Legislative Requirements

The Energy Policy Act of 1992 (EPACT) - requires that 75 percent of all covered light-duty vehicles acquired for Federal fleets in FY 1999 and beyond must be alternative fuel vehicles (AFV) (where the fleets have 20 or more vehicles, are capable of being centrally fueled, and are operated in a metropolitan statistical area with a population of more than 250,000 based on the 1980 census). Emergency, law enforcement, and national defense vehicles are exempt from these requirements. EPACT also sets a goal of using replacement fuels to displace at least 30 percent of the projected consumption of motor fuel in the United States annually by the year 2010.

The Energy Conservation and Reauthorization Act of 1998 (ECRA) - amended EPACT to allow one alternative fuel vehicle acquisition credit for every 450 gallons of pure biodiesel fuel consumed in vehicles over 8,500 pounds gross vehicle weight rating. "Biodiesel credits" may fulfill up to 50 percent of an agency's EPACT requirements. In addition, Federal agencies must prepare and submit a report to Congress outlining the agency's AFV acquisitions and future plans each year for 14 years.

Executive Order 13149 (2000), Greening the Government through Federal Fleet and Transportation Efficiency (E.O. 13149) - directs Federal agencies operating a fleet of 20 or more vehicles within the United States to reduce their annual petroleum consumption by at least 20 percent by the end of Fiscal Year (FY) 2005 (compared to FY 1999 levels) by using alternative fuels in AFVs more than 50 percent of the time, improving the average fuel economy of new light-duty petroleum-fueled vehicle acquisitions by one mile per gallon (mpg) by FY 2002 and 3 mpg by FY 2005, and using other fleet efficiency measures.

DOT Fiscal Year 2000 AFV Procurement Statistics

Table 1 lists DOT's FY 2000 AFV acquisitions.

Table 1: DOT's FY 2000 AFV Acquisitions

| Fiscal Year | Vehicle Acquisitions | Covered Acquisitions | AFV Acquisitions | AFV Percentage of Covered Acquisitions |
|--------------------|-----------------------------|-----------------------------|-------------------------|---|
| FY 2000 | 1,831 | 1,020 | 374 | 37% |

During FY 2000 vehicle procurement cycle, DOT acquired 362 AFVs. DOT also earned additional credits for the acquisition of CNG dedicated fuel AFVs, so the total vehicle credits earned was 374. While DOT purchased AFVs in FY 00, it did not meet the 75 percent AFV-acquisition requirement; DOT acquired 37 percent of the required 75 percent. This shortfall is due to several factors:

- Problems with the new compliance reporting system
- DOT's special vehicle requirements
- Limited AFV availability from the automotive manufacturers
- Limited AFV infrastructure support (refueling and maintenance)

AFV compliance reporting has changed in FY 2000, due to the new reporting requirements of E.O. 13149. Agencies are now required to enter their vehicle data through the *Federal Automotive Statistical Tool* (F.A.S.T.), an on-line reporting database managed by the U.S. Department of Energy and the General Services Administration (GSA). The FAST system combines the reporting requirements of EPACT and E.O. 13149 as well as the SF 82 report (an annual motor vehicle report submitted to GSA). The new reporting requirements of E.O. 13149 combined with the SF82 report made compliance reporting especially challenging for FY 00. The F.A.S.T. reporting system had initial implementation problems and technical changes that further complicated the reporting process. As a result of these challenges, there is concern by this agency that our AFV acquisitions and geographic exemptions were not accurately tabulated by the FAST reporting system, resulting in a reported lower level of compliance than was actually achieved.

The majority of DOT's missions fall under either transportation security or safety. For example, DOT operates a large number of light trucks that are specially equipped and outfitted for safety inspection missions. Because of their special configurations, it is difficult to utilize AFVs in these applications, and there is limited product availability in this vehicle class. Also, the AFV refueling and maintenance infrastructure is inadequate; there are only a small amount of AFV refueling stations, and the number of certified AFV dealerships is even less. These factors severely limit DOT's opportunities to acquire and operate AFVs.

DOT Fuel Use by in FY 1999 and FY2000

Table 2 presents DOT's FY 1999 reported fuel use data. E.O. 13149 requires that agencies will use their FY 1999 fuel use data as a baseline to measure their future petroleum reductions.

Table 2: DOT Fuel Use in FY 1999 (Reported)

| Fuel Type | Quantity | Unit |
|------------------|-----------------|----------------------------|
| Gasoline* | 5,929,437 | Gallons |
| E-85 | N/A | Gallons |
| Diesel | 299,531 | Gallons |
| CNG | 4,392 | Gasoline gallon equivalent |
| B20 | N/A | N/A |
| M-85 Methanol | N/A | N/A |

* Includes alternative fuel that cannot be identified

Table 3 presents DOT's FY 2000 reported fuel use data.

Table 3: DOT Fuel Use in FY 2000 (Reported)

| Fuel Type | Quantity | Unit |
|------------------|-----------------|----------------------------|
| Gasoline* | 6,829,545 | Gallons |
| E-85 | N/A | Gallons |
| Diesel | 328,269 | Gallons |
| CNG | 4,852 | Gasoline gallon equivalent |
| B20 | N/A | N/A |
| M-85 Methanol | N/A | N/A |

* Includes alternative fuel that cannot be identified

Alternative Fuel Use - Currently, DOT cannot accurately report its alternative fuel use due to data capture issues in the fleet card industry. Fuel providers, credit card processors and credit card companies do not use the same product codes for alternative fuels. Product codes are used to identify the type of fuel being purchased; e.g. unleaded gasoline, diesel, gasohol, ethanol, etc. In most cases, the alternative fuel product codes (when they exist) cannot be forwarded through the fleet card industry's electronic network.

For example, there are various product code derivatives for ethanol fuel, such as E85 (85% ethanol), E10 (10% ethanol), oxygenated fuels, etc. These multiple product codes cause inaccurate reporting; for example, fuels that contain small blends of ethanol and are not defined by EPACT as an alternative fuel (e.g., E10 or oxygenated fuels) are sometimes inaccurately reported as E85.

DOT's EPACT and E.O. 13149 Compliance Strategy

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To achieve compliance with the legislative mandates of EPACT and E.O. 13149, DOT plans to acquire 75 percent of new light-duty vehicles as AFVs, and use alternative fuel in these vehicles the majority of the time. DOT will pay for the incremental cost of AFVs acquired through the GSA Fleet Lease Program by using the 12-month rate option. DOT will also acquire the most fuel-efficient vehicles whenever possible.

Key Initiatives - In order to meet the requirements, DOT is working on several fleet initiatives as part of our comprehensive compliance strategy. DOT's key initiatives are:

- Participate in the AFV USER Program
- Concentrate AFVs in centralized fleets
- Acquire fuel efficient vehicles

DOT has been participating in the AFV USER (Utilization Supporting the Expansion of Refueling) Program, - an interagency effort to increase the use of AFVs in the following cities:

- Albuquerque, NM
- Denver, CO
- Melbourne-Titusville, FL
- Minneapolis, MN
- Salt Lake City, UT
- San Francisco, CA

The goal of the program is to concentrate AFVs in the six cities in order to develop a market base for refueling and maintenance infrastructure. Currently, DOT has 42 AFVs in the AFV USER Program areas. Besides concentrating AFVs in the AFV USER areas, DOT has been working to concentrate AFVs in our centralized fleets that have adequate alternative fuel support infrastructure. For example, DOT's Headquarters operations in Washington, DC are operating 15 AFVs. These AFVs are part of the DOT motor pool; they receive high mileage utilization while giving DOT employees operational experience with AFVs.

DOT is also researching its fleet profile to identify vehicles that could be replaced (once they meet the required replacement criteria) with more fuel-efficient vehicles. DOT also plans to acquire hybrid vehicles when they are commercially available and affordable.

DOT is forecasting that we will increase our AFV compliance to 59% during the FY 01 vehicle procurement cycle. While we cannot accurately measure our performance in meeting our petroleum reduction goals due to data capture issues with the fuel card industry, DOT will continue to implement the above mentioned measures that will help meet the goal.

Planned FY 2001 AFV Procurement Planning

Table 4 indicates DOT's AFV acquisition plans for FY 2001. Data was not available to forecast our AFV acquisitions for FY 2002. Acquisition plans are difficult to forecast and normally vary 20% annually, because annual fleet procurement is effected by the vehicle age, mileage, and replacement, and resale values.

Table 4: DOT's FY 2001 Planned Vehicle Acquisitions

| Fiscal Year | Projected Vehicle Acquisitions | Planned AFV Acquisitions | AFV Percentage of Covered Acquisitions |
|--------------------|---------------------------------------|---------------------------------|---|
| FY 2001 | 1,721 | 652 | 59% |